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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LIN, KELVIN Y	
ART UNIT	**PAPER NUMBER**
2142	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/848,711	ROBB ET AL.	
	Examiner	Art Unit	
	Kelvin Lin	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,14-17,19-21,23 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,14-17,19-21,23 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Response to Arguments

1. Applicant's arguments with respect to claims 1-12, 14-17, 19-21, and 23-24 have been considered but they are not persuasive for the following reasons:

2. Applicant is arguing:

1) The combination of Koseki in view of Shealy fails to teach or suggest " allowing the consumer to resume executing the paused event so that execution of the paused event resumes prior writing the log entry to the log file" as required by claim 1.

As point 1), where the applicant argues that Shealy states the probe function call is preferably embedded in the putnext routine to catch such ownership transfer before executes the logging system" contrary to claim 1, it has been considered but is not persuasive. At col.1, l.12-15, Shealy teaches the computer program object leakage, that is, error condition resulting from dynamically-allocated data that never deallocated. As Shealy teaches at fig. 2, after the message block (memory consumer) is allocated, then call history log routine, call log event (non-consumer), to log an event in a message block history, and the discard history log is called whenever a message block is freed and the history log can be discarded (see Shealy, col.3, l.50-62). In which the prob function includes several routines initialize history log (72), log event (74), discard history log (76) in history log driver (60), see Fig. 2. At col.9, l.49-64, Shealy teaches that if use-after-free error (object leakage problem) is found. The debug routine is

activated and the control is resumed to process additional message blocks as necessary (see Fig. 5, element 150-166). Therefore, Shealy does teach the message block allocation (memory consumer) is resumed prior to writing log entry clone (see Shealy col.6, l.6-7) to the log file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-12, 14-17, 19-21, and 23-24 are rejected under 35 U.S.C 103(a) as being unpatenable over Koseki et al., (USPN 6732124) in view of Shealy (USPN No. 5950211).
2. Regarding claim 1, Koseki teaches a method for logging events independently and separately from other processes in a computer system, comprising: (Koseki, col. 12, l.25, col. 49, l. 14, in which logging system corresponding to the method for logging event)
    i. Initiating an event by a consumer, wherein the event is processed by a computer system (Koseki, col.10, l.48-58, in which the transaction, a consumer consumes the memory, activates the

logging system, and the transaction for metadata allocation is processed by a computer system)

ii. Creating a log entry, wherein creation of the log entry is requested by the consumer and the log entry comprises information that describe the event (Koseki, col. 9, l.16-20, in which the log record represents the updated metadata object)

iii. Requesting that the log entry information be written to a log file, wherein the consumer surrenders control of the log entry, pausing execution of the event (Koseki, col. 6, l.19-20,col. 10, l. 47-57); and

iv. Cloning the log entry, wherein the log entry clone is a copy of an entire log entry that comprises the log entry information (Koseki, col. 28, l. 15-18, col.35, l.17-18, col.36, l.36-51); and

But, Koseki does not specifically teaches the consumer to resume the paused event.

However, Shealy teaches that

v. Allowing the consumer to resume executing the paused event so that execution of the paused event resumes prior to writing the log entry clone to the log file (Shealy, col.1, l.12-15, col.3, l.50-62, fig. 2, in which the message block is memory consumer, col.7, l.40-60, col. 8, l.13-24,l.58-64, in which the function call prob that access the device

driver resuming the even monitor, is triggered (resume the probing) whenever the ownership of a message block is transferred between modules. Moreover, the function prob call is preferably embedded in the putnext routine to catch such ownership transfer before executes the logging system).

Because knowing that the Shealy's message block leakages system is dealt with a message leaking system in the result of the large source (Shealy, col. 1, l.49-57). Furthermore, Koseki discloses there is a issue when the system crashed during such a big transaction, it would have been obvious to incorporate Shealy's message block leakage system with Koseki's feature for the big transaction. Therefore, the claimed claim invention would have been obvious to one of ordinary skill in the art at the time of the invention.

3. Regarding claim 2, Koseki further discloses the method of claim 1, wherein he cloning step is performed by a multiple-thread log manager. (Koseki, col 15, l. 40-45).

4. Regarding claim 3, Koseki further discloses the method of claim 1, further comprising:

- Queuing the log entry clone in a queue that determines when the log entry information is written to the log file (Koseki, col. 44, l. 39)

5. Regarding claim 4, Koseki further discloses the method of claim 3, wherein the queue is a first in, first out queue – as described in Microsoft computer dictionary 5th edition " queue follows a first in, first out constraint" - (Koseki, col. 44, l.39).

6. Regarding claim 5, Koseki further discloses the method of claim 3, wherein at some time the log entry clone has a turn, the method further comprising:

- Determining if the log entry clone is next in the queue; (Koseki, col.10, l. 40-43) and
- If the log entry clone is next in the queue, writing the log entry information to log file (Koseki, col. 10, l.43-46).

7. Regarding claim 6, Koseki further discloses the method of claim 1, wherein the log entry is an object comprising attributes populated with the log entry information (Koseki, col 30, l.9-11).

8. Regarding claim 7, Koseki further discloses the method of claim 1, wherein the event is a configuration event (Koseki, col. 22, l. 24-26).

9. Regarding claim 8, Koseki further discloses the method of claim 1, wherein the consumer is a client (Koseki, col.50, l.32-34).

10. Regarding claim 9, Koseki further discloses the method of claim 1,

wherein the event is a task event, the method further comprising:

- Starting a log transaction, wherein starting a log transaction comprises a consumer sending a message that a sequence of related task log entries are to be sent. (Koseki, col. 11, l.26-28)

11. Regarding claim 10, Koseki further discloses the method of claim 9, further comprising:

- Determining if the task event has ended, wherein the end of the task event comprises the completion of the task event or a failure to complete the task event (Koseki, col. 14, l.28-33); and
- If the task event has ended, terminating the log transaction, wherein terminating the log transaction indicates that a sequence of log entries associated with the task event has ended and that the log file may be rolled-over without interrupting logging of the task event.(Koseki, col. 18, l.65-67)

12. Regarding claim 11, Koseki further discloses the method of claim 9, wherein the consumer is a task manager (Koseki, col. 39, l.46-49)

13. Regarding computer readable medium claims 12-16 have limitations corresponding to claims 1, 3, 5, 6. Therefore, claims 12-16 are rejected for the same reason set forth in the rejection of claims 1, 3, 5, 6.

14. Regarding claim 17, Koseki further discloses a computer system that

supports logging events independently and separately from other processes in a computer system, comprising:

- A memory, that stores an application (Koseki, col. 50, l.36-37).
- A secondary storage device comprising a log file (Koseki, col. 51, l.64).
- A processor that runs the application, wherein the application comprises:
  - A consumer, wherein the consumer initiates an event that is processed by the processor, requests creation of a log entry comprising information be written to the log file (Koseki, col.10, l.48-58)
  - A multiple-threaded log manager, wherein the log manager, independently and separately from other processes, logs events, (Koseki, col.29, l.25-67) by:
  - Receiving the log entry from the consumer, thereby obtaining control of the log entry and pausing execution of the event (Koseki, col. 10, l. 36-58);
  - cloning the log entry, wherein the log entry clone is a copy of the log entry that comprises the log entry information; and (Koseki, col. 28, l. 15-18, col.35, l.17-18, col.36, l.36-51);

- allowing the consumer to resume executing the paused event so that execution of the paused event resumes prior to writing the log entry clone to the log file (Shealy, col. 1, l.12-15, col.3, l.50-62, col.7, l.40-60, col. 8, l.13-24,l.58-64, col.9, l.49-64) .

15. Regarding claim 19, Koseki further discloses the computer system of Claim 17, wherein the consumer is a task manager (Koseki, col. 39, l.46-49)

16. Regarding claim 20, Koseki further discloses the computer system of claim 17, wherein the log entry is an object that comprises attributes which are populated with the log entry information (Koseki, col. 30, l. 9-11).

17. Regarding claim 21, Koseki further discloses a method for logging events independently and separately from other processes in a computer system, comprising:

- Initiating an event by a consumer, wherein the event is a process executed on a computer system (Koseki, col. 9, l.13-15, l. 36-38);
- Creating a log entry, wherein creation of the log entry is requested by the consumer and the log entry comprises information that describes the event (Koseki, col.9, l. 16-17, col. 30, l.9-11);
- Requesting that the log entry information be written to a log file, whereby a consumer surrenders control of the log entry, pausing execution of the event (Koseki, col.6, l.19-20, col.10, l.47-57) ;

- Cloning the log entry, wherein the log entry clone is a copy of the an entire entry that comprises the log entry information (Koseki, col.10, l.35-37, col. 28, l.15-18); and allowing the consumer to resume executing the paused event, prior to writing the log entry information to the log file; (Shealy, col.7, l.40-60, col. 8, l.13-24,l.58-64); and
- Writing the log entry information to the log file using the log entry clone , after execution of the paused event has resumed (Shealy, col.1, l.12-15, col.3, l.50-62, fig. 2, in which the message block is memory consumer, col.7, l.40-60, col. 8, l.13-24,l.58-64).

18. Regarding claim 23, Koseki further discloses the method of claim 21, wherein the log entry clone determines when the log entry is written (Koseki, col.10, l.8-23).

19. Regarding claim 24, Koseki further discloses the method of claim 21, further comprising:

- Queuing the log entry clone in a queue that determines when the log entry information is written to the log file (Koseki, col. 44, l.39).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 571-272-3898. The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/16/07
KYL

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